

Amendments to the Specification:

Please replace the paragraphs beginning on page 7, line 22 through page 8, line 12 with the following rewritten paragraphs:

Figure 2 ~~is the semi-realistic enlarged view of the catalyst formulation surface. A~~
~~support upon which catalytically active material is deposited, multiple or~~
~~single reactants arrive to this catalytic material, which contains active site~~
~~whereupon reactants are transformed in to products and released back in to~~
~~bulk liquid~~

Figure 2**Figure 3** is the schematic of the continuous liquid extractor for solids wherein, **a** is the unidirectional gas bubbler connected to condenser, **b** is the condenser, **c** is the extraction vessel holding magnetic needle and solid to be leached/extracted, **d** is the magnetic stirrer unit, **e** is the vessel holding extraction liquid, and **f** is the high temperature bath

Figure 3**Figure 4** is the schematic of the fluidized bed in which catalyst formulation is processed wherein, **a** is the jacket through which constant temperature fluid is circulated, **b** is the atomizer through which liquids are sprayed in the fluidized bed, **c** is the gas solid separation mesh, **d** is the inlet for solution A, **e** is the inlet for solution B, **V1** and **V2** are valves

Figure 4**Figure 5** is the schematic of the catalyst preparation unit with simultaneous removal of liquid wherein, **a** is the inert gas inlet, **b** is the inlet for solutions A and B, **c** is the vessel holding magnetic needle, support and liquid, **d** inert gas outlet, **e** is the condenser, **f** is the liquid collector, **g** is the collection arm for liquid.

Figure 5**Figure 6** is the schematic of the catalyst preparation unit wherein, **a** is the inlet

for solution A and B, **b** is the vacuum line, **c** motor for coating pan, **d** is the coating pan, **e** is the nozzle for liquids A and B, **f** is the high temperature bath, **g** is the collection vessel for condensed liquid

Please replace the paragraph beginning on page 9, line 19, with the following rewritten paragraph:

In yet another embodiment, group IIA metal (also known as group 2 under IUPAC) used is selected independently or in combination with other group IIA metals.

Please replace the paragraph beginning on page 14, line 26, with the following rewritten paragraph:

As described in the earlier embodiment present invention is concerned with solid phase multi-component formulation in which the catalytically active material is placed on the surface of the solid support. It is invented that soluble catalytic material such as organometallic complexes if rendered insoluble can form said catalytically active solid phases wherein active sites are defined isotropic molecular entities otherwise existing only in solution state. Such insoluble material when dispersed and supported on the surface of the solid support can form simple solid catalyst of the choice. ~~The illustration as depicted in figure 2 outline the strategy as envisaged by the inventors.~~ In a support upon which catalytically active material is deposited, multiple or single reactants arrive to this catalytic material, which contains active sites whereupon reactants are transformed in to products and released back in to a bulk liquid.

Please replace the paragraph beginning on page 45, line 18, with the following rewritten paragraph:

Accordingly, process for the preparation of a heterogeneous catalytic formulation as a solid composite comprises of tumbling solid support in the rotating pan under current of inert gasses. Solution of catalytically active entity and catalytically inert additive is sprayed in such a way that catalytically active entity and catalytically inert additive is uniformly deposited on the solid support the tumbling of solid is continued for 1 to 48 hours. Solution of group IIA metal compound is subsequently sprayed and tumbling of wet solid is further continued for 1 to 48 hours and solids are recovered. The process described accordingly is carried out in the temperature ranging from 20 to 200 °C. Either heating the inert gas stream or rotating pan, which contains support, may achieve the process temperature. The laboratory apparatus employed to form present formulation is represented in figure 5 ~~figure 6~~ and such apparatus may be suitably scaled depending upon volume requirements.

Please replace the paragraph beginning on page 49, line 17, with the following rewritten paragraph:

For this reason various catalysts containing different metals such as rhodium, ruthenium, iridium, palladium, platinum, cobalt, nickel, molybdenum and iron were prepared according to methods described earlier and extracted at boiling temperatures of the solvents like, water, acetic acid, methanol, isopropanol, ether, tetrahydrofuran, ethyl acetate, acetone, acetonitrile, toluene, cyclohexane in the apparatus detailed in ~~figure 3~~ figure 2. The extraction was continued for several hours and subsequently solvent was changed. No appreciable loss of metal content was and physical morphology by visual comparison was detected. It is obviously true that sites containing hydroxy, methoxy and other basic radicals would be destroyed. These experiments indicate that catalyst would be stable in diverse range of solvents and need not be restricted to particular class of solvents. Similarly, catalysts were

leached in aqueous acids and alkaline solutions and loss of metals including transition metal or group IIA metal was detected.

Please replace the paragraph beginning on page 54, line 27, with the following rewritten paragraph:

This comparative example illustrates the validation of the hypothesis that anions having two or more negative charges when interacted with group IIA metal cations except Mg^{+2} invariably result in to a precipitate which is practically insoluble in organic solvents (including nonpolar, polar (protic and aprotic) and sparingly soluble in aqueous solvent in certain cases). This hypothesis was verified as follows. Solutions of different anions were interacted with group IIA metal ions. 0.1 molar solutions of anionic component (solution A) and 0.1 molar solutions of group IIA cation (solution B) component were prepared. 10 ml of solution B was mixed with 50 ml of solution A in boiling tubes solutions were thoroughly mixed on shaker for 10 hr. resulting suspensions were centrifuged and precipitate was removed by decanting supernatant liquid. Residual precipitate was diluted with distilled water followed by centrifugation and decantation was repeated thrice. To this precipitate 10 ml methanol was added and centrifugation and decantation procedure was repeated resulting wet precipitates were vacuum ~~vacume~~ dried at 50 °C. Mixtures where precipitate was not observed were discarded. Dried precipitate barium and strontium were found insoluble in water, methanol, ethanol, propanol, butanol, acetic acid, benzene xylene, petroleum ether, ethyl acetate, acetone methyl ethyl ketone, acetonitrile, dimethylformamide, chloroform, tetrahydrofuran. Where as some salts of calcium were found sparingly soluble.

Please replace the paragraph beginning on page 57, line 9, with the following rewritten paragraph:

Triphenyl phosphine trisulfonate was synthesized by following procedure.

Triphenylphosphine 50 g. was placed in sulfonation reaction followed by ~~vacuum~~ ~~vacuum~~ argon degassing and blanketed with argon. Sulfonation reactor was cooled to 5 °C and 200 g sulfuric acid was charged in the sulfonation reactor without allowing temperature of reactor to cross 10 °C. Addition of sulfuric acid was carried out with constant stirring with mechanical stirrer over a period of 2 hours. Reaction mixture assumed pale yellow color. To this reactor 280 g of 65 % oleum prepared as per previous experiment was charged over a period of 60 min. temperature of the sulfonation reactor was raised to 22 °C and reaction was continued for 76 hours. There after temperature of the reaction was lowered to 0°C and 50 ml distilled and degassed water was introduced in the sulfonation reactor without allowing temperature to rise beyond 5 °C over a period of three to four hours. This solution was further diluted with 500 ml water. The diluted solution was transferred to 3-lit jacketed vessel and chilled to 5 °C and consequently neutralized with 50 % w/w NaOH in water, which was previously degassed. At neutralization point solution assumed distinct yellow color at this instance NaOH addition was discontinued and pH was lowered to 6 by addition of con sulfuric acid. During neutralization formed sodium sulfate partially precipitates which was removed by filtration and resulting solution was concentrated under vacuum to 300 ml. formed sodium sulfate was removed by filtration. Mother liquor containing TPPTS was further diluted with 2000 ml degassed methanol and refluxed for two hours during which most of the sodium sulfate precipitated, supernatant extract of TPPTS in methanol was removed by filtration TPPTS extract in methanol was evaporated to ~~dryness~~ ~~dry-ness~~ and white colored solid was obtained (purity above 95% by P³¹NMR). This solid was dissolved in minimum amount of water and reprecipitated with degassed ethanol to obtain TPPTS with purity > 99 %.

Please replace the paragraph beginning on page 58, line 1, with the following rewritten paragraph:

Orthoboric acid (48 g) was dissolved in concentrated sulfuric acid 98% (200 ml) to this was added 65% oleum 200 ml. the temperature of the solution was raised to 60⁰C and excess sulfur trioxide was removed in high vacuum ~~vacuum~~ by providing a gas trap attachment containing calcium oxide (trap was chilled to -10⁰C) solution of orthoboric acid and sulfur trioxide was cooled to 5⁰C and 30 g triphenyl phosphine was added under argon blanket. Resulting mixture was agitated by mechanical stirrer and temperature of the reactor was raised to 58⁰C and reaction was continued for 90 hours. The temperature was reduced to 0⁰C and hydrolyzed with 500 ml degassed water. This solution was neutralized with 50% w/w sodium hydroxide in water until neutralization and formed precipitate was removed by filtration and mother liquor was concentrated to 300ml and diluted with 1000 ml methanol and refluxed for 2 hours. Resulting precipitate was removed by filtration. The extract in methanol was evaporated to obtain a solid which was suspended in 1000 ml methanol and to this 50 g microcrystalline cellulose avicel was added followed by 20 ml conc. H₂SO₄ and refluxed for 6 hours under argon blanket. Solution was cooled and filtered to remove avicel. To this 50 g. Avicel™ was again added and refluxed for another 6 hours suspension was filtered and methanolic extract was neutralized with 50 % NaOH w/w and filtered. Solution was evaporated to obtain white compound correct elemental analysis.

Please replace the paragraph beginning on page 60, line 14, with the following rewritten paragraph:

Diol intermediate (0.08 mol) from above said preparation was dissolved in chloroform and transferred to two necked flask attached with condenser and guard tube, pressure equalizing addition vessel. One drop of pyridine was added to flask and (0.2 mol) thionyl

chloride was dissolved in 25 ml chloroform and charged in addition vessel. Thionyl chloride was added to round bottom flask at room temperature. During addition considerable amount of sulfur dioxide and hydrogen chloride escaped from guard tube. The temperature of the flask was raised until chloroform started refluxing. After 5 hours reaction was quenched by addition of water. Chloroform was extracted with bicarbonate solution followed by water and dried by passing through bed of sodium sulfate. Chloroform was evaporated under vacuum ~~vacuum~~ at 50 °C to yield yellow colored oil (irritant and inflammatory to skin), which was distilled, in high-~~vacuum~~ vacuum to yield pale yellow colored oil.

Please replace the paragraph beginning on page 61, line 9, with the following rewritten paragraph:

Procedure of sulfonation was adopted from US patent 5756838. 0.5 g. of (R) BINAP was dissolved in 1.75 ml of concentrated sulfuric acid at 10 °C under argon. Afterwards, 7.5 ml of oleum 40 % w/w was added dropwise over 2-3 hours the resulting mixture was stirred at 10°C for 76 hours. After stirring this mixture was slowly poured over 100 g ice followed by dropwise addition of 50 % w/w NaOH until ~~until~~ solution was neutralized to pH 7. The resulting solution was concentrated under vacuum ~~vacuum~~ to 30 ml. to this 100 ml methanol was added in order to precipitate sodium sulfate. Methanolic extracted was evaporated under vacuum ~~vacuum~~ to obtain solid, which was dissolved in methanol and filtered. Methanol was evaporated to obtain white solid.

Please replace the paragraph beginning on page 65, line 5, with the following rewritten paragraph:

The procedure was adopted from US patent 4, 994,427 dated Feb. 19, 1991 to Davis et al. 500 mg. Acetyl acetate dicarbonyl rhodium (I) was added to vigorously stirred 10 ml

deaerated solution of 4 g. of sodium triphenylphosphine trisulfonate in water. After dissolution was complete stirring was continued for six hours under atmosphere of 1:1 ~~1:1~~ H₂/CO. The solution was then centrifuged ~~centrifuged~~ to remove precipitated rhodium. To this solution 80 ml absolute ethanol saturated with 1:1 H₂/CO were added to precipitate desired complex. Precipitate was recovered and vacuum ~~vacuum~~-dried.

Please replace the paragraph beginning on page 66, line 30, with the following rewritten paragraph:

Ruthenium binap 4 SO₃Na catalyst was prepared by reacting (0.01 g) of [Ru(benzene)Cl₂]₂ with two equivalents of (0.05 g) R- binap 4 SO₃Na in a 1:8 benzene ethanol ~~ethanol~~-mixture 4.5 ml to yield [Ru(benzene)Cl] R- binap 4 SO₃Na. Resulting solution was vacuum ~~vacuum~~-dried.

Please replace the paragraph beginning on page 68, line 24, with the following rewritten paragraph:

25.5 g of above product was dissolved in 500 ml water and to this solution 8.4 g. anhydrous ~~anhydrous~~-sodium carbonate was slowly added and stirred until effervescence ceased aniline was steam distilled aqueous solution was vacuum ~~vacuum~~-dried to obtain ~~obtain~~-a solid which was purified by precipitation from water and ethanol.

Please replace the paragraph beginning on page 69, line 5, with the following rewritten paragraph:

All support materials were sourced from commercial suppliers and were used without further size reduction. Specifications of supports are provided with appropriate specifications.

Support materials were extracted with hexane, ether methanol and water using assembly described in ~~figure 3~~ figure 2.

Please replace the paragraph beginning on page 69, line 10, with the following rewritten paragraph:

Each support was divided in to a lot of 25 g and suspended in 500 ml solution of 5 % barium nitrate solution. The suspension was refluxed for 24 hours. Suspension was brought to room temperature and solid were filtered and transferred to extractor described in ~~figure 3~~ figure 2 and extracted with 500 ml of water, acetone and petroleum ether (bp 60- 80 °C) solids were vacuum dried and stored for further use.

Please replace the Table beginning on page 70, line 12, with the following rewritten Table:

Example	Solution A	Solution B	Procedure
1	HRhCO(TPPTS)3, 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Saturated barium nitrate in water 2 ml	A suspension of 2 gm Davisil in 10 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously <u>simultaneously</u> over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
2	HRhCO(TPPTS) 3, 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Saturated strontium chloride in water 2ml	Solution A and solution B were added to a suspension of 2 gm Davisil in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously <u>simultaneously</u> over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.

3	HRhCO(TPPTS)3, 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	500 mg of calcium chloride in 2 ml water	Solution A and solution B were added to a suspension of 5 gm Davisil in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously <u>simultaneously</u> over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
4	HRhCO(TPPTS)3 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Barium nitrate saturated solution in water	Solution A and solution B were added to a suspension of 2 gm γ -alumina in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously <u>simultaneously</u> over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder
5	HRhCO(TPPTS)3, 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Strontium chloride saturated solution in water	Solution A and solution B were added to a suspension of 2 gm γ -alumina in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously <u>simultaneously</u> over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield <u>yield</u> pale yellow color solid powder
6	HRhCO(TPPTS)3 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Calcium chloride 500 mg solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm γ -alumina in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously <u>simultaneously</u> over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield <u>yield</u> pale yellow color solid powder
7	HRhCO (TPPTS)3, 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Barium nitrate saturated solution in water	Solution A and solution B were added to a suspension of 2 gm bentonite in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously <u>simultaneously</u> over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder
8	HRhCO (TPPTS)3, 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Strontium chloride saturated solution in water	Solution A and solution B were added to a suspension of 2 gm bentonite in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously <u>simultaneously</u> over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield <u>yield</u> pale yellow color solid powder

9	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Calcium chloride 500 mg solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm bentonite in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously <u>simultaneously</u> over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield <u>yield</u> pale yellow color solid powder
10	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Barium nitrate saturated solution in water	Solution A and solution B were added to a suspension of 2 gm charcoal in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 2 hours to yield black colored solid powder
11	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Strontium chloride saturated solution in water	Solution A and solution B were added to a suspension of 2 gm charcoal in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 2 hours to yield black colored solid powder.
12	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in 2 ml water	Calcium chloride 500 mg solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm charcoal in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 2 hours to yield black colored solid powder
13	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm Davisil in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously <u>simultaneously</u> over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield <u>yield</u> light brown colored solid powder.
14	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water.	Strontium chloride saturated solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm Davisil in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously <u>simultaneously</u> over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield light brown colored solid powder.

15	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm γ -alumina in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield light brown colored solid powder.
16	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water	Strontium chloride saturated solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm γ -alumina in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield light brown colored solid powder.
17	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Strontium chloride saturated solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm γ -alumina in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield light brown colored solid powder.
18	Ru (H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm γ -alumina in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield light brown colored solid powder.
19	Ru (H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm titania in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield light brown colored solid powder.
20	Ru (H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm zirconia in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield light brown colored solid powder.

21	Ru (H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	Solution A and solution B were added to a suspension of 2 gm activated charcoal in 10 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield black colored solid powder.
22	PdCl ₂ (TPPTS) ₂ 10 mg TPPTS 100 mg Poly acrylic acid sodium salt in 5 ml	Barium nitrate saturated solution 5 ml	Solution A and solution B were added to a suspension of 2 gm shredded shredded asbestos rope rope in 20 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B was added s over a period of 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield yellow gray colored solid powder.
23	PdCl ₂ (TPPTS) ₂ 10 mg TPPTS 100 mg Poly acrylic acid sodium salt in 5 ml	Strontium chloride saturated solution 5 ml	Solution A and solution B were added to a suspension of 2 gm shredded shredded asbestos rope rope in 20 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B was added over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield yellow gray colored solid powder.
24	PdCl ₂ (TPPTS) ₂ 10 mg TPPTS 100 mg Poly acrylic acid sodium salt in 5 ml	500 mg calcium chloride in 5 ml water.	Solution A and solution B were added to a suspension of 2 gm shredded shredded asbestos rope rope in 20 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B was added over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield yellow gray colored solid powder.
25	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	Solution A and solution B were added to a suspension of 2 gm davisil in 20 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B was added over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale orange colored solid powder.
26	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	Strontium chloride saturated solution 5ml	Solution A and solution B were added to a suspension of 2 gm davisil in 20 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B was added over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale orange colored colored solid powder.

27	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	500 mg calcium chloride in 5 ml water	Solution A and solution B were added to a suspension of 2 gm davisil in 20 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B was added over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale orange colored solid powder.
28	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	Solution A and solution B were added to a suspension of 2 gm bentonite in 20 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B was added over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield light orange colored solid powder.
29	PdAc ₂ tri (o) tolyl phosphine trisulfonated 25 mg Tri (o) tolyl phosphine trisulfonated 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	Solution A and solution B were added to a suspension of 2 gm bentonite in 20 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B was added over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow ocher colored solid powder.
30	PdAc ₂ tri (o) tolyl phosphine trisulfonated 25 mg Tri (o) tolyl phosphine trisulfonated 100 mg Dissolved in 2 ml water	Strontium chloride saturated solution 5ml	Solution A and solution B were added to a suspension of 2 gm bentonite in 20 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B was added over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow ocher colored solid powder.
31	PdAc ₂ tri o tolyl phosphine trisulfonated 25 mg Tri ortho tolyl phosphine trisulfonated 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	Solution A and solution B were added to a suspension of 2 gm alumina in 20 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B was added over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow ocher colored solid powder.
32	PdAc ₂ tri ortho tolyl phosphine trisulfonated 25 mg Tri ortho tolyl phosphine trisulfonated 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	Solution A and solution B were added to a suspension of 2 gm charcoal in 20 ml water and resulting suspension is vigorously agitated to this suspension solution A and solution B was added over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield black colored solid powder.

33	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated barium nitrate in 2 ml water	A suspension of 1 gm davisil in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield solid powder almost white with blue tinge.
34	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated barium nitrate in 2 ml water	A suspension of 1 gm alumina in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield solid powder almost white with blue tinge.
35	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated barium nitrate in 2 ml water	A suspension of 1 gm zirconia in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield solid powder almost white with blue tinge.
36	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated strontium chloride in 2 ml water	A suspension of 1 gm zirconia in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield solid powder almost white with blue tinge.
37	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated strontium chloride in 2 ml water	A suspension of 1 gm titania in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield solid powder almost white with blue tinge.
38	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated strontium chloride in 2 ml water	A suspension of 1 gm asbestos in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield gray colored solid powder.

39	(IrClCOD) 5 mg exchanged with TPPTS 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	A suspension of 1 gm davisil in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
40	(IrClCOD) 5 mg exchanged with TPPTS 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	A suspension of 1 gm keisulghur in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
41	(IrClCOD) 5 mg exchanged with TPPTS 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	A suspension of 1 gm bentonite in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
42	(RuCl ₂ COD) 5 mg exchanged with diphenyl phosphino ethane tetrasulfonate 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	A suspension of 1 gm davisil in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
43	(RuCl ₂ COD) 5 mg exchanged with diphenyl phosphino ethane tetrasulfonate 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	A suspension of 1 gm davisil in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
44	(RuCl ₂ COD) 5 mg exchanged with diphenyl phosphino ethane tetrasulfonate 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	500 mg calcium chloride in 2 ml water	A suspension of 1 gm davisil in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
45	Rh(COD)PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated strontium chloride solution 2 ml	A suspension of 1 gm davisil in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.

46	Rh(COD)PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated barium nitrate solution 2 ml	A suspension of 1 gm davisil in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
47	Rh (COD) PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated barium nitrate solution 2 ml	A suspension of 1 gm alumina in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
48	Rh(COD)PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated barium nitrate solution 2 ml	A suspension of 1 gm titania in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
49	HRhCO (TPATS) ₃ 10 mg 100 mg TPATS Carboxy methyl cellulose sodium 100 mg in 1 ml water	500 mg Calcium chloride solution in water 5 ml	A suspension of 1 gm titania in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
50	HRhCO (TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	Strontium chloride saturated solution in water 5 ml	A suspension of 1 gm alumina in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
51	HRhCO (TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	Barium nitrate saturated solution in water 5 ml	A suspension of 1 gm bentonite in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.

52	HRhCO (TPATS) ₃ 10 mg 100 mg TPATS Carboxy methyl cellulose sodium 100 mg in 1 ml water	Strontium chloride saturated solution in water 5 ml	A suspension of 1 gm titania in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
53	HRhCO (TPATS) ₃ 10 mg 100 mg TPATS Carboxy methyl cellulose sodium 100 mg in 1 ml water	Strontium chloride saturated solution in water 5 ml	A suspension of 1 gm Davisil in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
54	HRhCO (BISBIS) 50 mg BISBIS 200 mg 200 mg sodium sulfate Dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	A suspension of 2 gm Davisil in 5 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
55	HRhCO (BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	1 g calcium chloride solution In 5 ml water	A suspension of 2 gm Davisil in 10 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
56	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyacrylic acid sodium salt dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	A suspension of 2 gm titania in 10 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder. ⁷
57	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	Saturated strontium chloride solution is 5 ml water	A suspension of 2 gm alumina in 10 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 µl portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.

58	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	A suspension of 2 gm bentonite in 10 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
59	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	A suspension of 2 gm Davisil in 10 ml water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added simultaneously over a 3 hours in 50 μ l portions resulting suspension is further agitated for 10 hours to yield pale yellow colored solid powder.
60	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg sodium alginate dissolved in 2 ml water	Saturated solution of barium nitrate 5 ml	A suspension of 2 gm of davisil in 10 ml butane diol was formed and resulting suspension was vigorously agitated to this suspension solution A was added over a period of 2 hours and further agitated for 5 hours solution B was then added in portions of 50 μ l over a period of 3 hours resulting suspension is further agitated for 24 hours to yield gray colored solid powder.
61	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg oxalic acid sodium salt. Dissolved in 2 ml water	Saturated solution of barium nitrate 5 ml	A suspension of 2 gm of γ -alumina in 10 ml butane diol was formed and resulting suspension was vigorously agitated to this suspension solution A was added over a period of 2 hours and further agitated for 5 hours solution B was then added in portions of 50 μ l over a period of 3 hours resulting suspension is further agitated for 24 hours to yield pale yellow colored solid powder.
62	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg citric acid Dissolved in 2 ml water	Saturated solution of strontium chloride 5 ml	A suspension of 2 gm of davisil in 10 ml ethylene glycol was formed and resulting suspension was vigorously agitated to this suspension solution A was added over a period of 2 hours and further agitated for 5 hours solution B was then added in portions of 50 μ l over a period of 3 hours resulting suspension is further agitated for 24 hours to yield pale yellow colored solid powder.
63	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg polyacrylic acid sodium salt. Dissolved in 2 ml water	Saturated solution of barium nitrate 5 ml	A suspension of 2 gm of davisil in 10 ml butane diol was formed and resulting suspension was vigorously agitated to this suspension solution A was added over a period of 2 hours and further agitated for 5 hours solution B was then added in portions of 50 μ l over a period of 3 hours resulting suspension is further agitated for 24 hours to yield pale yellow colored solid powder.

64	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 300 mg Dissolved in 2 ml water	Saturated solution of barium nitrate 5 ml	A suspension of 2 gm of shredded shredded asbestos rope in 10 ml butane diol was formed and resulting suspension was vigorously agitated to this suspension solution A was added over a period of 2 hours and further agitated for 5 hours solution B was then added in portions of 50µl over a period of 3 hours resulting suspension is further agitated for 24 hours to yield gray colored solid powder.
65	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Sodium phosphate. 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	A suspension of 2 gm davisil in 10 ml tetrahydrofuran 50 % in water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added at simultaneously simultaneously in portions of 50µl over a period of 3 hours resulting suspension is further agitated for 24 hours to yield pale brown colored solid powder.
66	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Sodium silicate 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	A suspension of 2 gm alumina in 10 ml tetrahydrofuran 50 % in water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added at simultaneously simultaneously in portions of 50µl over a period of 3 hours resulting suspension is further agitated for 24 hours to yield pale brown colored solid powder.
67	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Polyvinyl sulfonate sodium. 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	A suspension of 2 gm titania in 10 ml tetrahydrofuran 50 % in water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added at simultaneously simultaneously in portions of 50µl over a period of 3 hours resulting suspension is further agitated for 24 hours to yield pale brown colored solid powder.
68	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Polyvinyl sulfonate sodium. 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	A suspension of 2 gm zirconia asbesto rope in 10 ml tetrahydrofuran 50 % in water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added at simultaneously simultaneously in portions of 50µl over a period of 3 hours resulting suspension is further agitated for 24 hours to yield pale brown colored solid powder.

69	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Polyvinyl sulfonate sodium. 500 mg. In 5 ml water	2g calcium chloride solution in water 5ml	A suspension of 2 gm shredded shredded asbesto rope in 10 ml tetrahydrofuran 50 % in water was formed and resulting suspension was vigorously agitated to this suspension solution A and solution B were added at simultaneously simultaneously in portions of 50µl over a period of 3 hours resulting suspension is further agitated for 24 hours to yield pale brown colored solid powder.
70	Cobalt (II), 4, 4', 4'',4'''-tetrasulfothalocynine oxygen adduct. 500 mg And 500 mg sodium sodium poly vinyl sulfonate in 5 ml water	Saturated strontium chloride in 5 ml water	A suspension of 2 gm shredded shredded asbesto rope in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield steel gray colored solid powder.
71	Cobalt (II), 4, 4', 4'',4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium phosphate in 5 ml water	Saturated barium nitrate in 5 ml water	A suspension of 2 gm keisulghur in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.
72	Cobalt (II), 4, 4', 4'',4'''-tetrasulfothalocynine . 500 mg And 500 mg sodium phosphate in 5 ml water	Saturated strontium chloride in 5 ml water	A suspension of 2 gm keisulghur in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.
73	Cobalt (II), 4, 4', 4'',4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium phosphate in 5 ml water	500mg. CaCl ₂ in 5 ml water	A suspension of 2 gm keisulghur in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.
74	Copper (II), 4, 4', 4'',4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium sulfate in 5 ml water	500mg. CaCl ₂ in 5 ml water	A suspension of 2 gm keisulghur in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.

75	Copper (II), 4, 4', 4'',4'''-tetrasulfophthalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated strontium chloride in 5 ml water	A suspension of 2 gm keisulghur in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.
76	Copper (II), 4, 4', 4'',4'''-tetrasulfophthalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	A suspension of 2 gm keisulghur in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.
77	Copper (II), 4, 4', 4'',4'''-tetrasulfophthalocynine . 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	A suspension of 2 gm bentonite in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.
78	Copper (II), 4, 4', 4'',4'''-tetrasulfophthalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated strontium chloride in 5 ml water	A suspension of 2 gm bentonite in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.
79	Manganese(II), 4, 4', 4'',4'''-tetrasulfophthalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated strontium chloride in 5 ml water	A suspension of 2 gm Davisil in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.
80	Manganese(II), 4, 4', 4'',4'''-tetrasulfophthalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	A suspension of 2 gm Davisil in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.

81	Manganese(II), 4, 4', 4'', 4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	A suspension of 2 gm γ -alumina in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.
82	Manganese(II), 4, 4', 4'', 4'''-tetrasulfothalocynine 500 mg And 500 mg sodium polyvinyl sulfonate in 5 ml water	Saturated barium nitrate in 5 ml water	A suspension of 2 gm γ -alumina in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.
83	Iron (III), 4, 4', 4'', 4'''-tetrasulfothalocynine oxygen adduct. 500 mg And 500 mg sodium sulfate in 5 ml water	Saturated strontium chloride in 5 ml water	A suspension of 2 gm Davisil in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.
84	Iron (III), 4, 4', 4'', 4'''-tetrasulfothalocynine oxygen adduct. 500 mg And 500 mg sodium sulfate in 5 ml water	Saturated barium nitrate in water 5 ml	A suspension of 2 gm Davisil in 10 ml methanol was formed and resulting suspension was vigorously agitated to this suspension solution A was added and stirred for 15 min and solution B was added at once resulting suspension is further agitated for 3 hours to yield light blue colored solid powder.

Please replace the Table beginning on page 83, line 26, with the following rewritten

Table:

Example	Solution A	Solution B	Procedure
85	HRhCO (TPPTS) ₃ 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Saturated barium nitrate in water 2 ml	2 gm Davisil was wetted with 100 μ l portion of solution A and evaporated under vacuum vacuum 10 mm Hg with simultaneous simultaneous tumbling remining remaining solution A was added in 100 μ l fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours to yield yield pale yellow colored solid powder.

86	HRhCO (TPPTS) ₃ 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Saturated strontium chloride in water 2ml	2 gm Davisil was wetted with 100 µl portion of solution A and evaporated under vaecume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours to yild <u>yield</u> pale yellow colored solid powder.
87	HRhCO (TPPTS) ₃ 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	500 mg of calcium chloride in 2 ml water	2 gm Davisil was wetted with 100 µl portion of solution A and evaporated under vaecume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours to yild <u>yield</u> pale yellow colored solid powder.
88	HRhCO(TPPTS) ₃ 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Barium nitrate saturated solution in water	2 gm γ-alumina was wetted with 100 µl portion of solution A and evaporated under vaecume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours to yild <u>yield</u> pale yellow colored solid powder.
89	HRhCO(TPPTS) ₃ 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Strontium chloride saturated solution in water 2ml	2 gm γ-alumina was wetted with 100 µl portion of solution A and evaporated under vaecume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours to yild <u>yield</u> pale yellow colored solid powder.
90	HRhCO(TPPTS) ₃ 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Calcium chloride 500 mg solution in 2 ml water	2 gm γ-alumina was wetted with 100 µl portion of solution A and evaporated under vaecume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours, filtered to yild <u>yield</u> pale yellow colored solid powder.

91	HRhCO(TPPTS)3, 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Barium nitrate saturated solution in water 2 ml	2 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
92	HRhCO(TPPTS)3, 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Strontium chloride saturated solution in water	2 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
93	HRhCO(TPPTS)3, 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Calcium chloride 500 mg solution in 2 ml water	2 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
94	HRhCO(TPPTS)3, 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Barium nitrate saturated solution in water	2 gm charcoal was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours to yield <u>yield</u> black colored solid powder.
95	HRhCO(TPPTS)3, 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Strontium chloride saturated solution in water	2 gm charcoal was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours to yield <u>yield</u> black colored solid powder.

96	HRhCO(TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in 2 ml water	Calcium chloride 500 mg solution in 2 ml water	2 gm charcoal was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours to yield <u>yield</u> black colored solid powder.
97	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm Davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered <u>filtered</u> to yield light brown colored solid powder..
98	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water.	Strontium chloride saturated solution in 2 ml water	2 gm Davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered <u>filtered</u> to yield light brown colored solid powder.
99	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm γ-alumina was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder.
100	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water	Strontium chloride saturated solution in 2 ml water	2 gm γ-alumina was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder.

101	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Strontium chloride saturated solution in 2 ml water	2 gm γ-alumina was wetted with 100 μl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 μl fractions and solid was isolated (moisture content ~20) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder.
102	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm γ-alumina was wetted with 100 μl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 μl fractions and solid was isolated (moisture content ~20) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder..
103	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm titania was wetted with 100 μl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 μl fractions and solid was isolated (moisture content ~20) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder.
104	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm zirconia was wetted with 100 μl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 μl fractions and solid was isolated (moisture content ~20) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder..
105	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm activated charcoal was wetted with 100 μl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 μl fractions and solid was isolated (moisture content ~20) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield black colored solid powder.

106	PdCl ₂ (TPPTS) ₂ 10 mg TPPTS 100 mg Poly acrylic acid sodium salt in 5 ml	Barium nitrate saturated solution 5 ml	2 gm shreaded <u>shredded</u> asbestos roap <u>rope</u> was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield yellow gray colored solid powder.
107	PdCl ₂ (TPPTS) ₂ 10 mg TPPTS 100 mg Poly acrylic acid sodium salt in 5 ml	Strontium chloride saturated solution 5 ml	2 gm shreaded <u>shredded</u> asbestos roap <u>rope</u> was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield yellow gray colored solid powder.
108	PdCl ₂ (TPPTS) ₂ 10 mg TPPTS 100 mg Poly acrylic acid sodium salt in 5 ml	500 mg calcium chloride in 5 ml water.	2 gm shreaded <u>shredded</u> asbestos roap <u>rope</u> was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield yellow gray colored solid powder.
109	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield leght <u>light</u> orange colored solid powder.

110	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	Strontium chloride saturated solution 5ml	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield light <u>light</u> orange colored solid powder.
111	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	500 mg calcium chloride in 5 ml water	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield light <u>light</u> orange colored solid powder.
112	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	2 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield light <u>light</u> orange colored solid powder.
113	PdAc ₂ trio tolyl phosphine trisulfonated 25 mg trio tolyl phosphine trisulfonated 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	2 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale brown colored solid powder.
114	PdAc ₂ trio tolyl phosphine trisulfonated 25 mg trio tolyl phosphine trisulfonated 100 mg Dissolved in 2 ml water	Strontium chloride saturated solution 5ml	2 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale brown colored solid powder.

115	PdAc ₂ trio tolyl phosphine trisulfonated 25 mg trio tolyl phosphine trisulfonated 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	2 gm alumina was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale brown colored solid powder.
116	PdAc ₂ trio tolyl phosphine trisulfonated 25 mg trio tolyl phosphine trisulfonated 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	2 gm charcoal was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 24 hours filtered to yield black colored solid powder.
117	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated barium nitrate in 2 ml water	1 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
118	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated barium nitrate in 2 ml water	1 gm alumina was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
119	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated barium nitrate in 2 ml water	1 gm zirconia was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.

120	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated strontium chloride in 2 ml water	1 gm zirconia was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
121	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated strontium chloride in 2 ml water	1 gm titania was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
122.	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated strontium chloride in 2 ml water	1 gm asbestos was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
123.	(IrClCOD) 5 mg exchanged with TPPTS 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	1 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.
124.	(IrClCOD) 5 mg exchanged with TPPTS 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	1 gm keisulghur was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.

125.	(IrClCOD) 5 mg exchanged with TPPTS 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	1 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vaecume <u>vacuum</u> 10 mm Hg with simultanioussimultaneous tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.
126.	(RuCl ₂ COD) 5 mg exchanged with diphenyl phosphino ethane tetrasulfonate 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	1 gm davisil was wetted with 100 µl portion of solution A and evaporated under vaecume <u>vacuum</u> 10 mm Hg with simultanioussimultaneous tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.
127.	(RuCl ₂ COD) 5 mg exchanged with diphenyl phosphino ethane tetrasulfonate 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	1 gm davisil was wetted with 100 µl portion of solution A and evaporated under vaecume <u>vacuum</u> 10 mm Hg with simultanioussimultaneous tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.
128.	(RuCl ₂ COD) 5 mg exchanged with diphenyl phosphino ethane tetrasulfonate 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	500 mg calcium chloride in 2 ml water	1 gm davisil was wetted with 100 µl portion of solution A and evaporated under vaecume <u>vacuum</u> 10 mm Hg with simultanioussimultaneous tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield light brown- yellow colored solid powder.
129.	Rh(COD)PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated strontium chloride solution 2 ml	1 gm davisil was wetted with 100 µl portion of solution A and evaporated under vaecume <u>vacuum</u> 10 mm Hg with simultanioussimultaneous tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.

130.	Rh(COD)PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated barium nitrate solution 2 ml	1 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.
131.	Rh(COD)PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated barium nitrate solution 2 ml	1 gm alumina was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.
132.	Rh(COD)PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated barium nitrate solution 2 ml	1 gm titania was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.
133.	HRhCO(TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	500 mg Calcium chloride solution in water 5 ml	1 gm titania was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
134.	HRhCO(TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	Strontium chloride saturated solution in water 5 ml	1 gm alumina was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow-green colored solid powder.

135.	HRhCO(TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	Barium nitrate saturated solution in water 5 ml	1 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
136.	HRhCO(TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	Strontium chloride saturated solution in water 5 ml	1 gm titania was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
137.	HRhCO(TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	Strontium chloride saturated solution in water 5 ml	1 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
138.	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg sodium sulfate dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.
139.	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	1 g calcium chloride solution In 5 ml water	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.

140.	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyacrylic acid sodium salt dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	2 gm titania was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.
141.	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	Saturated strontium chloride solution is 5 ml water	2 gm alumina was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.
142.	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	2 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow colored solid powder.
143.	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
144.	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg sodium alginate Dissolved in 2 ml water and 0.5 ml butane diol	Saturated solution of barium nitrate 5 ml	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow-green colored solid powder.

145.	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg oxalic acid sodium salt. Dissolved in 2 ml water and 0.5 ml butane diol	Saturated solution of barium nitrate 5 ml	2 gm alumina was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
146.	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg citric acid Dissolved in 2 ml water and 0.5 ml ethylene glycol	Saturated solution of strontium chloride 5 ml	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
147.	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg polyacrylic acid sodium salt. Dissolved in 2 ml water and 0.5 ml butane diol	Saturated solution of barium nitrate 5 ml	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
148.	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 300 mg Dissolved in 2 ml water	Saturated solution of barium nitrate 5 ml	2 gm shredded <u>shredded</u> asbestos rope <u>rope</u> was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
149.	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Sodium phosphate. 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale brown colored solid powder.

150.	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Sodium silicate 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	2 gm alumina was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale brown colored solid powder.
151.	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Polyvinyl sulfonate sodium. 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	2 gm titania was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale brown colored solid powder.
152.	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Polyvinyl sulfonate sodium. 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	2 gm zirconia was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale brown colored solid powder.
153.	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Polyvinyl sulfonate sodium. 500 mg. In 5 ml water	2g calcium chloride solution in water 5ml	2 gm shredded <u>shredded</u> asbestos rope <u>rope</u> was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield gray colored solid powder.
154.	Cobalt (II), 4, 4', 4'',4'''-tetrasulphthalocynine. 500 mg And 500 mg sodium sodium poly vinyl sulfonate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm shredded <u>shredded</u> asbestos rope <u>rope</u> was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield blue-gray colored solid powder.

155.	Cobalt (II), 4, 4', 4'',4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium phosphate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm kesilghur was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
156.	Cobalt (II), 4, 4', 4'',4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium phosphate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm kesilghur was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
157.	Cobalt (II), 4, 4', 4'',4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium phosphate in 5 ml water	500mg. CaCl ₂ in 5 ml water	2 gm kesilghur was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
158.	Copper (II), 4, 4', 4'',4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium sulfate in 5 ml water	500mg. CaCl ₂ in 5 ml water	2 gm kesilghur was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
159.	Copper (II), 4, 4', 4'',4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm kesilghur was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.

160.	Copper (II), 4, 4', 4'', 4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm kesilghur was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
161.	Copper (II), 4, 4', 4'', 4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
162.	Copper (II), 4, 4', 4'', 4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
163.	Manganese(II), 4, 4', 4'', 4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
164.	Manganese(II), 4, 4', 4'', 4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.

165.	Manganese(II), 4, 4', 4'', 4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm alumina was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
166.	Manganese(II), 4, 4', 4'', 4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium polyvinyl sulfonate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm alumina was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultaneous tumbling remaining solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
167.	Iron (III), 4, 4', 4'', 4'''-tetrasulfothalocynine oxygen adduct. 500 mg And 500 mg sodium sulfate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.
168.	Iron (III), 4, 4', 4'', 4'''-tetrasulfothalocynine oxygen adduct. 500 mg And 500 mg sodium sulfate in 5 ml water	Saturated barium nitrate in water 5 ml	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vaceume <u>vacuum</u> 10 mm Hg with simultanio <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered to yield pale blue colored solid powder.

Please replace the Table beginning on page 99, line 1, with the following rewritten

Table:

Example	Solution A	Solution B	Procedure
169	HRhCO(TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Saturated barium nitrate in water 2 ml	2 gm Davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. relux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
170	HRhCO(TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Saturated strontium chloride in water 2ml	2 gm Davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. relux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
171	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	500 mg of calcium chloride in 2 ml water	2 gm Davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. relux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.

172	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Barium nitrate saturated solution in water	2 gm γ -alumina was wetted with 100 μ l portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 μ l fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
173	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Strontium chloride saturated solution in water 2ml	2 gm γ -alumina was wetted with 100 μ l portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 μ l fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
174.	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Calcium chloride 500 mg solution in 2 ml water	2 gm γ -alumina was wetted with 100 μ l portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 μ l fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
175.	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Barium nitrate saturated solution in water 2 ml	2 gm bentonite was wetted with 100 μ l portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 μ l fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.

176.	HRhCO(TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Strontium chloride saturated solution in water	2 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
177.	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Calcium chloride 500 mg solution in 2 ml water	2 gm bentonite was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours to yield <u>yield</u> pale yellow colored solid powder.
178.	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Barium nitrate saturated solution in water	2 gm charcoal was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours to yield <u>yield</u> black colored solid powder.
179.	HRhCO (TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in water 2 ml	Strontium chloride saturated solution in water	2 gm charcoal was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours to yield <u>yield</u> black colored solid powder.

180.	HRhCO(TPPTS) ₃ , 50 mg, TPPTS 200 mg. Dissolved in 2 ml water	Calcium chloride 500 mg solution in 2 ml water	2 gm charcoal was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic waer <u>water</u> and suspension was further agitated for 10 hours to yild <u>yield</u> black colored solid powder.
181.	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic waer <u>water</u> and suspension was further agitated for 10 hours filtered <u>filtered</u> to yield light brown colored solid powder.
182.	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water.	Strontium chloride saturated solution in 2 ml water	2 gm davisil was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic waer <u>water</u> and suspension was further agitated for 10 hours filtered <u>filtered</u> to yield light brown colored solid powder..
183.	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm γ-alumina was wetted with 100 µl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 µl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic waer <u>water</u> and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder.

184.	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Dissolved in 2 ml water	Strontium chloride saturated solution in 2 ml water	2 gm γ-alumina was wetted with 100 μl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 μl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. relux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder.
185.	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Strontium chloride saturated solution in 2 ml water	2 gm γ-alumina was wetted with 100 μl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 μl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. relux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder.
186.	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm γ-alumina was wetted with 100 μl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 μl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. relux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder.
187.	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm titania was wetted with 100 μl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remaining <u>remaining</u> solution A was added in 100 μl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. relux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder.

188.	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm zirconia 2 gm γ-alumina was wetted with 100 μl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 μl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water <u>water</u> and suspension was further agitated for 10 hours filtered to yield light brown colored solid powder.
189.	Ru(H)(Cl)(TPPTS) ₃ 50 mg TPPTS 200 mg Sodium polyvinylsulfonate 500 mg Dissolved in 2 ml water	Barium nitrate saturated solution in 2 ml water	2 gm activated charcoal was wetted with 100 μl portion of solution A and evaporated under vacuum <u>vacuum</u> 10 mm Hg with simultaneous <u>simultaneous</u> tumbling remining <u>remaining</u> solution A was added in 100 μl fractions and solid was isolated this powder was added to benzene 25 ml in apparatus described in fig. reflux <u>Reflux</u> was started and solution B was added in equal fractions over a period of 2 hours while simultaneous <u>simultaneous</u> removal of azeotropic water and suspension was further agitated for 10 hours filtered to yield black colored solid powder.
190.	PdCl ₂ (TPPTS) ₂ 10 mg TPPTS 100 mg Poly acrylic acid sodium salt in 5 ml	Barium nitrate saturated solution 5 ml	2 gm shreaded <u>shredded</u> asbestos roap <u>rope</u> was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μl fractions until <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution. <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultaneous <u>simultaneous</u> removal of azeotropic water and suspension was further continued . Formed suspension was agitated. 10 hours filtered to yield yellow gray colored solid powder.

191.	PdCl ₂ (TPPTS) ₂ 10 mg TPPTS 100 mg Poly acrylic acid sodium salt in 5 ml	Strontium chloride saturated solution 5 ml	2 gm shreaded <u>shredded</u> asbestos roap <u>rope</u> was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield yellow gray colored solid powder.
192.	PdCl ₂ (TPPTS) ₂ 10 mg TPPTS 100 mg Poly acrylic acid sodium salt in 5 ml	500 mg calcium chloride in 5 ml water.	2 gm shreaded <u>shredded</u> asbestos roap <u>rope</u> was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution . <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for <u>for</u> 10 hours filtered to yield yellow gray colored solid powder.
193.	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for <u>for</u> 10 hours filtered to yield light <u>light</u> orange colored solid powder.

194.	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	Strontium chloride saturated solution 5ml	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield leght <u>light</u> orange colored solid powder.
195.	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	500 mg calcium chloride in 5 ml water	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for-for 10 hours filtered to yield leght <u>light</u> orange colored solid powder.
196.	PdAc ₂ BYPYDS 25 mg BYPYDS 100 mg Dissolved in 2 ml water	Barium nitrate saturated solution 5ml	2 gm bentonite was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield leght <u>light</u> orange colored solid powder.

197.	<p>PdAc_2 tri ortho tolyl phosphine trisulfonated 25 mg</p> <p>Tri ortho tolyl phosphine trisulfonated 100 mg</p> <p>Dissolved in 2 ml water</p>	<p>Barium nitrate saturated solution 5ml</p>	<p>2 gm bentonite was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μl portion of solution A and solvent component was azeotropically removed, remining<u>remaining</u> solution A was added in 100 μl fractions untill<u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss<u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow brown colored solid powder.</p>
198.	<p>PdAc_2 tri ortho tolyl phosphine trisulfonated 25 mg</p> <p>Tri ortho tolyl phosphine trisulfonated 100 mg</p> <p>Dissolved in 2 ml water</p>	<p>Strontium chloride saturated solution 5ml</p>	<p>2 gm bentonite was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μl portion of solution A and solvent component was azeotropically removed, remining<u>remaining</u> solution A was added in 100 μl fractions untill<u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss<u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for .10 hours filtered to yield pale yellow brown colored solid powder.</p>
199.	<p>PdAc_2 trio tolyl phosphine trisulfonated 25 mg</p> <p>Tri ortho tolyl phosphine trisulfonated 100 mg</p> <p>Dissolved in 2 ml water</p>	<p>Barium nitrate saturated solution 5ml</p>	<p>2 gm alumina was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μl portion of solution A and solvent component was azeotropically removed, remining<u>remaining</u> solution A was added in 100 μl fractions untill<u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss<u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow brown colored solid powder.</p>

200.	<p>PdAc₂ tri ortho tolyl phosphine trisulfonated 25 mg</p> <p>Tri ortho tolyl phosphine trisulfonated 100 mg</p> <p>Dissolved in 2 ml water</p>	<p>Barium nitrate saturated solution 5ml</p>	<p>2 gm charcoal was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining<u>remaining</u> solution A was added in 100 µl fractions untill<u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultanio<u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 24 hours filtered to yield black colored solid powder.</p>
201.	<p>NiCl₂.(TPPTS)₂ 25 mg</p> <p>TPPTS 100 mg</p> <p>Sodium carboxy methyl cellulose 100 mg</p> <p>Dissolved in 2 ml</p>	<p>Saturated barium nitrate in 2 ml water</p>	<p>1 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining<u>remaining</u> solution A was added in 100 µl fractions untill<u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultanio<u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale solid powder of white color with blue tinge.</p>

202.	<p>$\text{NiCl}_2 \cdot (\text{TPPTS})_2$ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml</p>	Saturated barium nitrate in 2 ml water	<p>1 gm alumina was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μl portion of solution A and solvent component was azeotropically removed, remining<u>remaining</u> solution A was added in 100 μl fractions untill<u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss<u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for for 10 hours filtered to yield solid powder of white color with blue tinge.</p>
203	<p>$\text{NiCl}_2 \cdot (\text{TPPTS})_2$ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml</p>	Saturated barium nitrate in 2 ml water	<p>1 gm zirconia was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μl portion of solution A and solvent component was azeotropically removed, remining<u>remaining</u> solution A was added in 100 μl fractions untill<u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss<u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale blue colored solid powder.</p>
204.	<p>$\text{NiCl}_2 \cdot (\text{TPPTS})_2$ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml</p>	Saturated strontium chloride in 2 ml water	<p>1 gm zirconia was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μl portion of solution A and solvent component was azeotropically removed, remining<u>remaining</u> solution A was added in 100 μl fractions untill<u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss<u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield solid powder of white color with slight blue tinge.</p>

205.	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated strontium chloride in 2 ml water	1 gm titania was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield solid powder of white color with blue tinge.
206.	NiCl ₂ .(TPPTS) ₂ 25 mg TPPTS 100 mg Sodium carboxy methyl cellulose 100 mg Dissolved in 2 ml	Saturated strontium chloride in 2 ml water	1 gm asbestos was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield gray colored solid powder.
207.	(IrClCOD) 5 mg exchanged with TPPTS 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	1 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.

208.	(IrClCOD) 5 mg exchanged with TPPTS 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	1 gm keisulghur was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.
209.	(IrClCOD) 5 mg exchanged with TPPTS 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	1 gm bentonite was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated 10 hours filtered to yield pale yellow colored solid powder.
210.	(RuCl ₂ COD) 5 mg exchanged with diphenyl phosphino ethane tetrasulfonate 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	1 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow-brown colored solid powder.

211.	(RuCl ₂ COD) 5 mg exchanged with diphenyl phosphino ethane tetrasulfonate 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	Saturated strontium chloride in 2 ml water	1 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow-brown colored solid powder.
212.	(RuCl ₂ COD) 5 mg exchanged with diphenyl phosphino ethane tetrasulfonate 100 mg. Poly acrylic acid sodium salt 100 mg In 2 ml water	500 mg calcium chloride in 2 ml water	1 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow-brown colored solid powder.
213.	Rh(COD)PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated strontium chloride solution 2 ml	1 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.

214.	Rh(COD)PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated barium nitrate solution 2 ml	1 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.
215.	Rh(COD)PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated barium nitrate solution 2 ml	1 gm alumina was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.
216.	Rh(COD)PF ₆ / S,S chiraphos tetrasulfonate 25 mg S,S chiraphos tetrasulfonate 25 mg Sodium alginate 100 mg dissolved in 2 ml water	Saturated barium nitrate solution 2 ml	1 gm titania was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.

217.	HRhCO(TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	500 mg Calcium chloride solution in water 5 ml	1 gm titania was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
218.	HRhCO(TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	Strontium chloride saturated solution in water 5 ml	1 gm alumina was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
219.	HRhCO(TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	Barium nitrate saturated solution in water 5 ml	1 gm bentonite was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow-green colored solid powder.

220.	HRhCO(TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	Strontium chloride saturated solution in water 5 ml	1 gm titania was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
221.	HRhCO(TPATS) ₃ 10 mg 100 mg TPATS carboxy methyl cellulose sodium 100 mg in 1 ml water	Strontium chloride saturated solution in water 5 ml	1 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow-green colored solid powder.
222.	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg sodium sulfate dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.

223.	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	1 g calcium chloride solution In 5 ml water	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.
224.	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyacrylic acid sodium salt dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	2 gm titania was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.
225.	HRhCO (BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	Saturated strontium chloride solution is 5 ml water	2 gm alumina was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.

226.	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.
227.	HRhCO(BISBIS) 50 mg BISBIS 200 mg 200 mg polyvinyl sulfonic acid dissolved in 2 ml water	Saturated barium nitrate solution is 5 ml water	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.
228.	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg sodium alginate Dissolved in 2 ml water and 0.5 ml butane diol	Saturated solution of barium nitrate 5 ml	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.

229.	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg oxalic acid sodium salt. Dissolved in 2 ml water and 0.5 ml butane diol	Saturated solution of barium nitrate 5 ml	2 gm alumina 2 gm was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.
230.	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg citric acid Dissolved in 2 ml water and 0.5 ml ethylene glycol	Saturated solution of strontium chloride 5 ml	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.
231.	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 100 mg 100 mg polyacrylic acid sodium salt. Dissolved in 2 ml water and 0.5 ml butane diol	Saturated solution of barium nitrate 5 ml	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow colored solid powder.

232.	PtCl ₂ (TPPTS) ₂ 50 mg TPPTS 300 mg Dissolved in 2 ml water	Saturated solution of barium nitrate 5 ml	2 gm shredded <u>shredded</u> asbestos reap <u>rope</u> 2 gm zirconia was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution . <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale yellow-gray colored solid powder.
233.	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Sodium phosphate. 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution . <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale brown colored solid powder.
234.	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Sodium silicate 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	2 gm alumina was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution . <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale brown colored solid powder.

235.	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Polyvinyl sulfonate sodium. 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	2 gm titania was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution . <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale brown colored solid powder.
236.	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Polyvinyl sulfonate sodium. 500 mg. In 5 ml water	Saturated barium nitrate solution in water 5ml	2 gm zirconia was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution . <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for 10 hours filtered to yield pale brown colored solid powder.
237.	Cobalt N, N'ethylene bis (salicyldiamine) 5-sulfonato sodium 100 mg. Polyvinyl sulfonate sodium. 500 mg. In 5 ml water	2g calcium chloride solution in water 5ml	2 gm shreded <u>shredded</u> asbestos roap <u>rope</u> was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 μ l fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene and solution . <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for <u>for</u> 10 hours filtered to yield gray colored solid powder.

238.	Cobalt (II), 4, 4', 4'',4'''-tetrasulfophthalocynine . 500 mg And 500 mg sodium-sodium poly vinyl sulfonate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm shreded <u>shredded</u> asbestos roap <u>rope</u> was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene-and-solution. <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for-for 10 hours filtered to yield blue-gray colored solid powder.
239.	Cobalt (II), 4, 4', 4'',4'''-tetrasulfophthalocynine. 500 mg And 500 mg sodium phosphate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm keisulghur was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene-and-solution. <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for-for 10 hours and filtered to yield pale blue colored solid powder
240.	Cobalt (II), 4, 4', 4'',4'''-tetrasulfophthalocynine. 500 mg And 500 mg sodium phosphate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm keisulghur was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene-and-solution. <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultaniouss <u>simultaneous</u> removal of azeotropic water and suspension was further continued. Formed suspension was agitated for-for 10 hours and filtered to yield pale blue colored solid powder

241.	Cobalt (II), 4, 4', 4'',4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium phosphate in 5 ml water	500mg. CaCl ₂ in 5 ml water	2 gm keisulghur was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for <u>for</u> 10 hours and filtered to yield pale blue colored solid powder
242.	Copper (II), 4, 4', 4'',4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium sulfate in 5 ml water	500mg. CaCl ₂ in 5 ml water	2 gm keisulghur was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for <u>for</u> 10 hours and filtered to yield pale blue colored solid powder
243.	Copper (II), 4, 4', 4'',4'''-tetrasulfothalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm keisulghur was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for <u>for</u> 10 hours and filtered to yield pale blue colored solid powder

244.	Copper (II), 4, 4', 4'',4'''-tetrasulfophthalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm keisulghur was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for-for 10 hours and filtered to yield pale blue colored solid powder.
245.	Copper (II), 4, 4', 4'',4'''-tetrasulfophthalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm bentonite was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for-for 10 hours and filtered to yield pale blue colored solid powder.
246.	Copper (II), 4, 4', 4'',4'''-tetrasulfophthalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm bentonite was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for-for 10 hours and filtered to yield pale blue colored solid powder.

247.	Manganese(II), 4, 4', 4'', 4'''- tetrasulfophthalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for <u>for</u> 10 hours and filtered to yield pale blue colored solid powder.
248.	Manganese(II), 4, 4', 4'', 4'''- tetrasulfophthalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for <u>for</u> 10 hours and filtered to yield pale blue colored solid powder.
249.	Manganese(II), 4, 4', 4'', 4'''- tetrasulfophthalocynine. 500 mg And 500 mg sodium silicate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm alumina was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 µl portion of solution A and solvent component was azeotropically removed, remining <u>remaining</u> solution A was added in 100 µl fractions untill <u>until</u> uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution <u>Solution</u> B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for <u>for</u> 10 hours and filtered to yield pale blue colored solid powder.

250.	Manganese(II), 4, 4', 4'', 4'''-tetrasulfophthalocynine. 500 mg And 500 mg sodium polyvinyl sulfonate in 5 ml water	Saturated barium nitrate in 5 ml water	2 gm alumina was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining remaining solution A was added in 100 μ l fractions untill until uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution Solution B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for for 10 hours and filtered to yield pale blue colored solid powder.
51.	Iron (III), 4, 4', 4'', 4'''-tetrasulfophthalocynine oxygen adduct. 500 mg And 500 mg sodium sulfate in 5 ml water	Saturated strontium chloride in 5 ml water	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining remaining solution A was added in 100 μ l fractions untill until uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution Solution B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for for 10 hours and filtered to yield pale blue colored solid powder.
252.	Iron (III), 4, 4', 4'', 4'''-tetrasulfophthalocynine oxygen adduct. 500 mg And 500 mg sodium sulfate in 5 ml water	Saturated barium nitrate in water 5 ml	2 gm davisil was suspended in benzene 25 ml in apparatus described in fig agitated. The temperature of the suspension was slowly raised such that it gently refluxes to which was added 100 μ l portion of solution A and solvent component was azeotropically removed, remining remaining solution A was added in 100 μ l fractions untill until uniform suspension volume of suspension was maintained while maintaining volume by pumping benzene. and solution Solution B was added in equal fractions over a period of 2 hours and simultanioussimultaneous removal of azeotropic water and suspension was further continued. Formed suspension was agitated for for 10 hours and filtered to yield pale blue colored solid powder.

Please replace the paragraph beginning on page 121, line 9, with the following rewritten paragraph:

Note 3: fluidized bed deposition was carried out in equipment described in ~~figure (4)~~ figure 3.

Page 123, entry 266, last column, replace the entry as follows:

2 gm Davisil was wetted with 100 μ l portion of solution A and evaporated under vacuum ~~vacuum~~ 10 mm Hg with simultaneous ~~simultaneous~~ tumbling remaining ~~remining~~ solution A was added in 100 μ l fractions and solid was isolated (moisture content ~20 %) this powder was added to solution B in equal fractions over a period of 2 hours and suspension was further agitated for 10 hours filtered ~~filtered~~ to yield light brown colored solid powder.

Please replace the paragraph beginning on page 148, line 5, with the following rewritten paragraph:

These examples illustrate the stability of catalysts in liquid phases. Stability of catalyst was assessed in order to establish integrity and resilience of catalyst in liquid phase reactions. Apparatus according to ~~figure 3~~ figure 2 was assembled and 5g. catalyst was added in the extraction vessel. 0.5-liter solvent was charged in extraction vessel. Solids in the extractor were agitated and solvent in the round bottomed flask was set to boiling. Solid catalyst was continuously leached for 24 hours. Boiling liquid was brought to room temperature and analyzed for group IIA metal and transition metal. No leaching of catalytically active material was apparent.

Please replace the paragraph beginning on page 180, line 3, with the following rewritten paragraph:

Preparation of catalysts: catalyst was previously dried by extraction with boiling THF over sodium wire followed by vacuum ~~vacuum~~ and stored over phosphorus pentoxide catalyst specifications:

Please replace the paragraph beginning on page 181, line 13, with the following rewritten paragraph:

Recovered catalyst was washed with saturated bicarbonate, tetrahydrofuran and diethyl ether and recycled after drying in ~~vacuum~~ vacuum.

Please replace the paragraph beginning on page 188, line 1, with the following rewritten paragraph:

Procedure: mixture of 1.6 g (0.001 mol) of distilled diethyl malonate, 25 ml ethanol and 0.4 g (5×10^{-4} mol) of 40 % formaldehyde contained in 50 ml round bottomed flask was cooled to 0 °C and 5 gm of catalyst was added and mixture was stirred at room temperature for 24 hours and then refluxed for 12 hours. Suspension was centrifuged to recover catalyst. Analysis of reaction liquid indicated 80 % conversion of diethyl malonate. Liquid was evaporated and extracted with diethyl ether. Extract was dried with sodium sulfate. Catalyst was washed with ethanol, diethyl ether and dried under ~~vacuum~~ vacuum. Catalyst was recycled to obtain equivalent activity.

Please replace the paragraph beginning on page 189, line 13, with the following rewritten paragraph:

Procedure: 250 ml round bottomed flask equipped with reflux condenser was charged with 5 gm of catalyst to which solution of 10.6 g (0.1 mmol) benzaldehyde was charged as solution in 100 ml solution in acetone. Magnetic stirrer bar was added in the reaction mixture

reaction mixture was stirred at ambient temperature for 24 hours. Suspension was centrifuged to recover catalyst. Analysis of reaction liquid indicated 77 % conversion benzaldehyde. Catalyst was washed with ethanol, diethyl ether and dried under ~~vacuum~~ vacuum. Catalyst was recycled to obtain equivalent activity.

Please replace the paragraph beginning on page 190, line 11, with the following rewritten paragraph:

Procedure: round bottomed flask equipped with reflux condenser was charged with catalyst 5 gm. To this solution of diphenyl phosphine 1 ml (5.75 mmol) in 30 ml dry degassed dimethylformamide was added at room temperature. Suspension was degassed with repetitive vacuum ~~vacuum~~ and argon flushing. After heating to 100 °C for 30 min. 10 mmol (2.04 gm.) iodobenzene and 20 mmol (2.25 gm) diazabicyclooctane in 30 ml dimethylformamide was added and resulting solution was maintained at 100 °C. Three additional portions of 1-ml diphenyl phosphine each were added at 12-hour interval thereafter. Reaction was continued for 76 hours. Reaction was stopped by cooling flask to room temperature. Catalyst was recovered by centrifugation and washed by dimethylformamide. Filtrates were combined and evaporated to obtain sticky residue, which was diluted with 50-ml tetrahydrofuran. Solution was analyzed with 31 P NMR. Following compounds were detected triphenylphosphine, triphenylphosphine oxide, diphenylphosphine and diphenylphosphineoxide.

Please replace the paragraph beginning on page 191, line 15, with the following rewritten paragraph:

Procedure: round bottomed flask equipped with reflux condenser was charged with catalyst 5 gm. To this solution of diphenyl phosphine 1 ml (5.75 mmol) in 30-ml dry degassed dimethylformamide was added at room temperature. Suspension was degassed with repetitive

~~vacuum~~ ~~vacuum~~ and argon flushing. After heating to 100 °C for 30 min. 10 mmol (1.87 gm.) 2-bromoanisole and 20 mmol (2.25 gm) diazabicyclooctane in 30 ml dimethylformamide was added and resulting solution was maintained at 100 °C. Three additional portions of 1-ml diphenyl phosphine each were added at 12-hour interval thereafter. Reaction was continued for 76 hours. Reaction was stopped by cooling flask to room temperature. Catalyst was recovered by centrifugation and washed by dimethylformamide. Filtrates were combined and evaporated to obtain sticky residue, which was diluted with 50-ml tetrahydrofuran. Solution was analyzed with ^{31}P NMR as described in previous example. 83 % conversion of 2-bromoanisole was observed. Quantitative estimation of phosphines was not determined.

Please replace the paragraph beginning on page 192, line 5, with the following rewritten paragraph:

Deuteration ~~Deuteration~~ of C_6H_6 to C_6D_6

Please replace the paragraph beginning on page 192, line 7, with the following rewritten paragraph:

Catalyst pretreatment: catalyst was refluxed twice with 3-ml deuterium oxide recovered with centrifugation and dried under ~~vacuum~~ vacuum. This was essential to remove protons on the solid support.